

per cent. read for the school of Literæ Humaniores (Philosophy, Classical History, and Philology), 20 per cent. for the school of Modern History, 17 per cent. for the school of Theology, 15 per cent. for the school of Law, 7 per cent. for the school of Mathematics, and only 6½ for the school of Physical Science.

Of the 2,400 undergraduates 24 per cent. hold college scholarships or exhibitions varying in value from 30*l.* to 100*l.* a year, exclusive of scholarships or exhibitions granted by external bodies.

There are at this moment 360 fellows of colleges, exclusive of heads and professors, of whom 140 (out of a total of 160 college lecturers and tutors) are resident and engaged in teaching. The average endowment of a fellowship is 250*l.*

There are thirty-seven University professors and six University readers or assistant professors, of whom nine give no definite courses and have no pupils. They are distributed in subjects thus: Theology, five; Medicine, two; Law, four, and a reader; Lit. Human. seven, and a reader; Mathematics, three; Physical Science, seven, and four readers; Modern History, three, and a reader; Fine Art and Modern Languages, seven.

Taking the total number of teachers, both collegiate and professorial, and the total number of honour-students, according to the subjects which they respectively teach and pursue (which subjects may be ascertained from the calendar), we find that in Literæ Humaniores the proportion of collegiate and professorial teachers to students is 1:5½; in Mathematics, 1:6; in Physical Science, 1:7; in Modern History, 1:5; in Law, 1:15½.

Estimating the average annual income of a college lecturer or tutor at 500*l.*, we find that 75,000*l.* is the sum required to pay at this rate for 150 such persons. This sum is exactly what the scholarship fund (40,000*l.*), plus 140 fellowships of 250*l.* each amounts to; so that, practically, the teaching in Oxford colleges is paid for, not by the parents of undergraduates, but by a portion of the collegiate endowments—to wit, the scholarship fund and two-fifths of the fellowship fund.

The statement recently made by Sir John Lubbock in the debate on the Universities Bill in the House of Commons, to the effect that Oxford practically has done nothing for the development of the study of physical science, is amply justified by the above figures; there are only seven professors and four readers of all the various physical sciences in Oxford; only one twenty-fourth of the undergraduate students in the place pursue the study of physical science; and of all the three hundred and sixty fellowships in the various colleges only five are held by persons (exclusive of professors) who have been elected to them in consideration of their attainments in physical science. In four more fellowships the application of mathematics to physics has been allowed to count in establishing a student's claim to such fellowship.

The public schools teach physical science to so few boys, and teach it so inefficiently, that there are quite as many scholarships for excellence in this subject offered to the matriculating students as there are worthy candidates. The fact that the public schools never teach physical science to all their pupils and only as a rule to the duller boys in the school, who are carefully selected for this

study on account of their failure in classics and mathematics, is simply due to the fact that neither the colleges nor the university introduce any branch of physical science into any one of their compulsory examinations. And this fact is further explained by the fact that the college lecturers and tutors, and even the heads of houses, are, with few exceptions, men who have been school-masters, or who hope to be so, and who are identified in every way with the pedagogic profession.

In fact, using the term without any offensive implication, the College authorities, together with the school-masters, form a "ring" whose interest it is to suppress a class of studies of which they are themselves ignorant. The university professoriate, which should act as a higher body, to control and stimulate the pedagogic class of teachers, is, as already mentioned, a nonentity. There is no such higher power—the "University" is ridden over rough-shod by the "Academy for Young Gentlemen."

AN OXFORD MAN

THE BASQUES

Essai sur la Langue Basque. Par F. Ribary. Traduit du Hongrois par J. Vinson. (Paris: F. Vieweg, 1877.)

Basque Legends. By W. Webster. (Griffith and Farren 1877.)

THE Etruscans perhaps excepted, there is no race that has had a greater attraction for the ethnologist and the student of language than the Basque. Defended by the mountain-fastnesses of the Pyrenees, with peculiar physiognomy, language, and manners, they seem to be the last waif and stray of a people and family of speech which have elsewhere disappeared. Whence did they come? and what is their kinship? are the two questions which have long been discussed warmly and to little purpose. Are we to regard them as the descendants of the ancient Iberi, and find their traces, with Wilhelm von Humboldt, in the local names of Spain, of Sicily, and of Southern Italy, or are we to bring them from Africa on the one side, or from America on the other, or finally let them drop from the clouds, or grow up spontaneously on their native soil? Certain it is that languages like Basque were spoken in the north of Spain under Roman rule; at least, the town called Graccuris, in honour of Tiberius Gracchus, is a genuine Basque compound of *iri* or *hiri* "city," like Iria Flavia, "the Flavian burgh." Exclusive of emigrants in South America, the present Basque population amounts to about 800,000, of whom 660,000 are Spanish, and 140,000 French. Their language has little resemblance to any other known tongue, whether ancient or modern. Erro claimed for it the privilege of having been spoken in Paradise; and Larramendi proudly named his grammar (1729) "*El Imposible Vencido*"—"The Impossible Conquered." The native works upon the language, however, were all tainted with mysticism and want of scientific method, and it is only of late years that this interesting speech has been examined in the light of science and exact scholarship, and grammars composed which treat it in a rational way. Materials for the work have been prepared by the researches of Prince Lucien Bonaparte, who has accurately mapped out the several dialects of the language, has noted their individual characteristics and

peculiarities, and has actually discovered some fast-perishing dialects which had hitherto remained unknown. His magnificent work on the Basque verb has, it may be said, created the scientific philology of the language.

Basque, or Eskuara (probably meaning "mode of speaking"), as the Basques themselves call it, is an agglutinative tongue, postfixing, for the most part, the sounds which express the relations of grammar. The grammar would be simple were it not for the verb, at once the wonder of native writers and the despair of foreign linguists. The verb incorporates the pronouns, having a different form for "I have," "I have it," "I have it for you," &c., as well as (in some dialects) for addressing a woman, a man, a superior, and an equal. It possesses also three voices, two primary tenses, at least five moods, and more than one participle or infinitive. When analysed these forms turn out to be amalgamations of the verbal stem with various pronouns and modifying particles, but their origin is so obscured by phonetic decay, and their number is so immense, that we cannot much wonder if, according to the legend, the devil, having spent seven years at Burgos in the vain attempt to learn the language, was at last obliged to leave the Basques to their primitive simplicity and virtue. The eight principal dialects—Labourdin, Souletin, Eastern Bas-Navarraï, Western Bas-Navarraï, Northern Haut-Navarraï, Southern Haut-Navarraï, Guipuscoan, and Biscayan—differ a good deal from one another, and the three sub-dialects of Spanish Basque—Roncal, Aezcoan, and Salazarese, have yielded to Prince Bonaparte interesting archaic forms and words. It is unfortunate that our knowledge of Basque does not reach back further than 1545, when the first book in the language—the "Poems of Dechepare"—was printed, and a restoration of earlier grammatical forms must therefore rest solely upon a comparison of the existing dialects.

The grammar of the Hungarian professor, which M. Vinson has translated into French, is an extremely good one, and its value has been increased by the introduction he has prefixed to it, as well as by the notes he has added by way of supplement and correction, and by a very useful and almost exhaustive Basque bibliography he has appended at the end. These notes will form the subject of an article Prince Bonaparte is preparing for publication. Prof. Ribary's exposition of the intricacies of Basque grammar is singularly clear, and I know of no work from which the foreign student could gain a better insight into the machinery of the verb or a better key to its multitudinous forms. Certain of these are compared with corresponding forms in Magyar, Vogul, and Mordvinian, which, like the Basque, are able to incorporate the objective pronoun. The volume may be heartily recommended for both scientific and practical purposes.

While the Basque language has been attracting so much attention, the equally interesting and important folk-lore of the country has been almost wholly neglected. With the doubtful exception of Chaho, none of the Basque legends were "even noticed till within the last two years, when M. d'Abbadie read the legend of the Tartaro before the Société des Sciences et des Arts de Bayonne, and M. Cerquand his 'Légendes et Récits Populaires du Pays Basque,' before the sister society at Pau." Mr. Webster's book, therefore, is doubly welcome, consisting as it does of tales and legends written down

from the lips of the narrators, and literally translated into English with the co-operation of M. Vinson. Mr. Webster has divided the stories into (1) Legends of the Tartaro, (2) of the Heren-Suge, or Seven-headed Serpent, (3) animal tales, which are neither fables nor allegories, (4) legends of Basa-Jauna, Basa-Andre, and other Lamiñak, or fairies, (5) tales of witchcraft, (6) Contes des Fées, and (7) religious legends. The Tartaro is a one-eyed Cyclops, and what is told about him will interest classical scholars. He lives in a cave among his flocks, and is blinded with a red-hot spit by the hero, who contrives to escape by the help of the unsuspecting sheep. In some versions the story of the talking ring is combined with that of the Cyclops, and in one form of the legend communicated to me by M. d'Abbadie, and alluded to by Mr. Webster, the hero is made to fight with a body without a soul. Grimm has quoted analogous stories to that of the Cyclops, among the Oghuzian Turks, Karelians, and others, and M. d'Abbadie heard an almost exactly similar one in Eastern Africa, while Mr. Moseley has pointed out to me that the Chinese also have their "one-eyed people who live to the east of Chuk Lung, and have one eye in the centre of the face." (See my "Principles of Comparative Philology," second edition, pp. 321-323, and for an account of a Mongolian Cyclops, Mr. Howorth, in the *Journal of the R.A.S.*, vii., 2 (1875), p. 232.) It is within the bounds of possibility that the Greek myth of the Cyclops may have been borrowed by the colonists in Sicily or the voyagers to Tartessus from some ancient Basque population. However this may be, the legends of the seven-headed serpent connect themselves very strikingly with Western Asia. Accadian mythology had much to tell of "a seven-headed serpent," the dragon of Chaos, which tempted man to sin and waged war with Merodach, the Chaldean Michael. The Indian Vritra has but three heads, like the Orthros, the Kerberos, the Ekhidna, and the Khimæra of the Greeks, but it is at least curious that Orthros, with his master Geryon, was localised at Cadiz in the later days of Greek mythology. Basa Jauna, again, "the wild man of the woods," with his wife Basa-Andre, though once represented as a kind of vampire, is usually described as a sort of Satyr, reminding us not only of the classical Pan, but of the far older Chaldean Hea-bani, the friend and councillor of the Babylonian Herakles. Basa-Andre, says Mr. Webster, "appears sometimes as a kind of mermaid, as a beautiful lady sitting in a cave and 'combing her locks with a comb of gold,' in remote mountain parts."

On the whole, however, there is very little that is native in these Basque legends, at least so far as their origin and texture are concerned. As Mr. Webster has noticed, the resemblance of many of them to the Keltic stories of the West Highlands is too minute to be the result of accident, while a large part of them is familiar to us in a French or even a German form. How the Basques could have borrowed Gaelic stories is at present not easy to explain; it is more probable, however, that this took place through maritime intercourse at a comparatively recent period than at some remote date when the ancestors of the Kelts and the Basques may be supposed to have lived in close proximity. The impression left upon the mind by the legends Mr. Webster has collected is that the Basques are neither imaginative nor original, and

this is borne out by what he tells us of their unreasoning "adherence to what they believe to be the text of these old tales. 'I don't understand it, but the history says so;' 'it is so,' 'the story says so,' was positively affirmed again and again." This conservatism accounts for the survival of so many pagan ideas and customs among the people, among which the legends themselves may be reckoned. The latter are believed like "the histories of the Bible, or the 'Lives of the Saints.' In fact, the problem of reconciling religion and science presents itself to the Basque mind in this strange guise—how to reconcile these narratives with those of the Bible and of the Church. The general solution is that they happened before the time of which the Bible speaks, or before Adam fell. They are *lege zaharreko istorriak*—'histories of the ancient law'—by which is apparently meant the time before Christianity. 'This happened, sir, in the time when all animals and all things could speak,' was said again and again by the narrators at the commencement of their story;" a statement which curiously fits in with a similar belief among the Bushmen. Altogether Mr. Webster has produced a most interesting book, and we hope that the welcome given to it may induce him to make it but the first instalment of other researches among the folk-lore of the Basques.

A. H. SAYCE

OUR BOOK SHELF

French Accent. By A. H. Keane. (Asher and Co., 1877.)

THIS is an excellent and useful little pamphlet, in which the author claims to have discovered and formulated for the first time the laws which regulate French accentuation. Putting aside the tonic accent which usually falls on the last syllable of a word, and corresponds with the toned syllable of the Latin or Italic original, we have three accents: the acute, the grave, and the circumflex, which Mr. Keane terms respectively the euphonic, the grammatical, and the historical. The circumflex denotes the loss of a sound, as do also the acute when on initial *e*, and the grave when on final *e*. The grave is alone employed grammatically to indicate the grammatical changes of words, and Mr. Keane lays down the two rules that "e followed by grammatical *e* mute, one consonant intervening, takes the grave accent," and that "every unaccented *e* followed by one consonant not final is mute." Mr. Keane shows himself well acquainted with the latest philological researches into the French language, and both pupil and teacher will find great assistance from his attempt to introduce law and order into the nature and position of the French accents. However, he is not altogether the first in the field, and it must be remembered that the philological ignorance of those who have stereotyped the use of the accents has caused it to be somewhat arbitrary. The Neufchatel Bible of 1535 has no accents, and the first to employ them regularly, though somewhat capriciously, was Jacques Dubois, in the sixteenth century. In "An Introductory for to Learn French trewly," published by Du Guez, in London, probably about 1560, the accents are written below the line.

Étude sur la Dégénérescence Physiologique des Peuples Civilisés. Par M. Tschouriloff. (Paris: Leroux, 1876.)

THIS is a careful and conscientious discussion of a class of statistics that have never been so carefully discussed before, and have in consequence been interpreted by different writers in very different senses. There are two

questions, both of which M. Tschouriloff answers in the affirmative, but which perhaps he does not always separate as clearly as could be wished; the one is whether the French and other civilised nations are deteriorating in their *physique*, and the other whether their deterioration is due to the abstraction of able-bodied men to serve and perish in the army. He has no doubt as to the deterioration in France, Sweden, and Saxony; thus, in the latter country, the number of men too infirm to serve as conscripts has largely increased of late years; in 1832–36, one-third of the men were rejected; in 1850–54, one-half. He quotes numerous medical authorities, whose opinions are printed in the article, "Recrutement," in the *Dictionnaire Médical*, to show the evil effects of industrial occupation on the health of factory workmen, and alludes to many other interesting facts of the same nature. But the bulk of the work is occupied in tracing the effects of the conscription on the French race. The statistical examination of the returns of the medical examiners is of a necessity very complex, allowances and corrections having to be made on many grounds. Even so apparently simple a problem as that of determining the amount of vigour abstracted from a population by the absence of a given fraction of them during a limited period, such as that of the great war, is in reality very complicated, and requires the free use of tables of mortality and of fecundity for different ages. The upshot of the author's inquiries is to show that the amount so abstracted is much greater than appears at first sight to be the case. He therefore ascribes a very seriously damaging effect to the vigour of a population by the carrying on of great wars. It is truly sad to read the statistical tables of the increase in France of a long series of such hereditary diseases as scrofula, hare-lip, varicose veins, paralysis, madness, and skin maladies, due in large part to the propagation of the race by men who had been rejected as too infirm to serve in the army, and to so many of the healthy men having been destroyed or displaced. This treatise will become a standard work of reference, both in respect to its conclusions and to the statistical operations by which they have been attained.

F. G.

The Northern Barrier of India. A Popular Account of the Jummoo and Kashmir Territories. By Frederic Drew. With Map and Illustrations. (London: Stanford, 1877.)

THIS is a popular edition of Mr. Drew's valuable work on Jummoo and Kashmir, noticed in NATURE, vol. xii. p. 550. That work was perhaps too formidable for the general reader to undertake, and Mr. Drew has therefore done well in selecting from it those parts likely to be of general interest. The selection has been judiciously made, and as the illustrations have been retained, and a map showing the races as well as the physical features, the work will be found of great value and interest by those who hesitate to undertake the larger volume. It deserves a wide circulation.

The Two Americas; an Account of Sport and Travel. By Major Sir Rose Lambert Price, Bart. With Illustrations. (London: Sampson Low, 1877.)

WE took up this book with little expectation of finding much in it either edifying or interesting, and have been most agreeably disappointed. The author, in one of Her Majesty's ships, touched at various places on the east and west coasts of South America, and although most of the ground has already been gone over, he has the faculty of seeing and describing the already known under new aspects. He also visited Mexico, California, and the Yosemite region. From beginning to end the narrative is thoroughly entertaining, and even those who are well read in American travel will find that Sir Rose Price is able to tell them much that is new.